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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,689	05/26/2006	Hiroshi Misuda	OHK-0015	4367
23353 7590 11/16/2007 RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			EXAMINER KLAUS, LISA NHUNG	
			ART UNIT 2832	PAPER NUMBER
			MAIL DATE 11/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,689	Applicant(s) MISUDA, HIROSHI	
	Examiner Lisa N. Klaus	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-10 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/26/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. (US Pub. 2004/0007450) in view of Okada et al. (US 7,030,509).

Kojima discloses an operating device comprising:

- a dial unit 4;
- a sensor 8B;
- a detecting unit 9A;

Kojima does not disclose the plurality of sensors.

Okada discloses an apparatus and method for controlling movement of a movable member comprising:

- wherein the rotary switch mechanism includes a plurality of such position sensors 18a, 18b and a detection switch SW2 that switches an output signal in correspondence to the rotational position of the dial unit (see col. 5, lines 12-30);
- wherein the entire angle range over which the dial unit is allowed to rotate is divide into a plurality of range blocks and each divided block is designated to one of the position sensors;

- the position sensor to be used is selected based upon the output signal from the detection switch (see columns 5 and 6).
- Regarding claim 2, Kojima and Okada do not disclose the rotary switch mechanism includes three position sensors and two detection switches.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to make more position sensors and switches for the purpose of using to control the additional functions.

Allowable Subject Matter

3. Claims 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 6-10 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The prior art does not teach or suggest the rotary switch comprising:

- Claim 3: the first position sensor is used when the output signal from the first detection switch is in an ON state and the output signal from the second detection switch is in an OFF state, the second position sensor is used when the output signals from the first detection switch and the second detection switch are both in an OFF state, and the third position sensor is used when the output signal from the first detection switch is in an OFF state and the output signal from the second detection switch is in ON state.

- Claim 4: the detection switch is each turned on/off as a movable pin thereof comes into contact with a cam surface of a cam that rotated as the dial unit rotates and the movable pin is moved via the cam.
- Claim 5: the wall formed in an arc shape is caused to rotate as the dial unit rotates, the detection switch includes a movable pin disposed on the locus of the wall displacement and the detection switch enters an ON state as the movable pin comes into contact with the wall and is pressed by the wall to become displaced but remains in an OFF state otherwise.
- Claim 6: the rotary switch mechanism includes a detection switch that enters an ON state over a specific rotation range of the dial unit and remains in an OFF state over the remaining range, wherein the range over which the detection switch is in an ON state is designated to specific rotational positions of the dial, whereas the rotational position of the dial unit is determined based upon the output signal provided by the position sensor over the range in which the detection switch remains in an OFF state.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

6. Any inquiry concerning this communication should be directed to Lisa Nhung Klaus whose telephone number is (571)272-1993, and whose fax number is 703-872-9306. In the event that I am not reached, you can contact my supervisor, Mr. Elvin G. Enad at (571)272-1990 or the tech center receptionist at (703) 308-1782.

Lisa Nhung Klaus

Patent Examiner - Art Unit 2832

November 9, 2007


MICHAEL A FRIEDHOFER
PRIMARY EXAMINER
A.U. 2832